# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appeal No:

In re the Application of: YANO, Seiichi et al.

Group Art Unit: 3629

Serial No.: 10/030,149

Examiner: Michael J. Fisher

Filed: January 28, 2002

P.T.O. Confirmation No.: 8179

For: VEHICLE RESALE PRICE ANALYSIS SYSTEM

# **BRIEF ON APPEAL**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Date: May 16, 2007

Sir:

This is an Appellant's Brief in support of the appeal of the final rejections of Claims 1-8 and 10-23, asserted in the Final Office Action mailed December 18, 2006.

A Notice of Appeal was filed March 16, 2007 which was timely filed. This Appellant's Brief is timely filed by May 16, 2007.

If any further fees are required in connection with the filing of this Appeal Brief, please charge our Deposit Account No. 01-2340.

05/17/2007 HMARZI1 00000009 10030149 U1 FC:14U2 500.00 OP

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# I. REAL PARTY IN INTEREST

The real party in interest is SYSTEM LOCATION CO., LTD.

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# II. RELATED APPEALS AND INTERFERENCES

No related appeals or interferences are known to the undersigned as of the date that this Appeal Brief is being filed.

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## III. STATUS OF CLAIMS

Claims 1-8, and 10-23 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Further, Claims 2-7 and 13-20 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Still further, Claim 8 and claim 21, remain rejected under 35 U.S.C. 102(e) as being anticipated by Whitworth (U.S. 6,622,129). Finally, Claims 1-7, 10-20, 22 and 23, remain rejected under 35 U.S.C. 103(a) as being unpatentable over Whitworth (U.S. 6,622,129). These rejections were asserted in the Office Action mailed December 18, 2006. Claim 9 is canceled.

A copy of the text of claims 1-8 and 10-23, the rejections of which have been appealed, is attached as an Appendix to this Brief.

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# IV. STATUS OF AMENDMENTS

An Amendment was filed under 37 CFR §1.111 on September 29, 2006. In this Amendment, claims 1-3, 13-21 were amended.

In response, on December 12, 2006, a Final Office Action was mailed, rejecting claims 1-8 and 10-23.

On March 16, 2007, a Notice of Appeal from the Examiner to the Board of Patent Appeals and Interferences was filed, appealing the final rejections of claims 1-8 and 10-23.

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#### V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention is a vehicle resold price analysis system (See Figure 1, paragraph [0088] of the specification) which estimates information concerning a sold price, a remaining price, or a remaining value rate of a vehicle before resale using data concerning the resold vehicle (See paragraph [0092] of the specification). This is done using an asset evaluation system (25) (See paragraph [0094] of the specification) that estimates a current price of a vehicle in a using contact period at arbitrary time using data concerning resold vehicle. Further, a remaining value setting system (22) (See paragraph [0094] of the specification) sets a remaining value concerning new contract vehicle using data concerning resold vehicle. Still further, the remaining value setting system (22) sets the remaining value concerning new contract goods using data concerning resold goods and this remaining value setting system (22) sets the remaining value concerning a new vehicle type using data concerning the resold vehicle (See paragraph [0094] of the specification).

The following is a recitation of independent claims 1-3, 8, 9 and 13-21 indicating where in the specification each element of each claim find support.

Claim 1 recites, "A method of determining a vehicle resold price which estimates information concerning a sold price, a remaining price, or a remaining value rate of a vehicle before resale, the method comprising the steps of:

a first step which extracts data concerning resold vehicle resold within a predetermined period (See Abstract; paragraph [0105]; paragraph [0107] of the specification; Figure 1, S1; Figure 9, S1),

a second step which extracts a factor which has affected the vehicle resold price by correlation analysis using said data extracted at the first step (See Abstract; paragraph [0092] of the specification); and

a third step which obtains multi-regression equation from a correlation of the extracted above-mentioned factor and the data concerning sold price (See Abstract paragraphs [0145], [156-158] and [0167] of the specification),

wherein the multi-regression equation obtained in the third step is used for estimating the information concerning estimated sold price, estimated remaining price, or estimated remaining value rate of vehicle before resale (See Abstract paragraphs [0092] of the specification),

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale are determined using data concerning resold vehicle including a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, a turbo and supercharger, a roof shape, emission control, a body size, automobile-tax classification, a weight tax, an insurance class, a using contract year, the expiration year of a using contract, a using contact period, a new vehicle price, a sold price after expiration of using contract, mileage

at the time of resale, and an assessment evaluation at the time of resale." (See paragraphs [0021] and [0090] of the specification).

Claim 2 recites, "A vehicle resold price analysis system which estimates information concerning a sold price, a remaining price, or a remaining value rate of a vehicle before resale, comprising:

an estimated sold price calculation system using a correlation equation or a table having a correlation for obtaining information concerning estimated sold price, estimated remaining price, or estimated remaining value rate of vehicle before resale is obtained (See paragraph [0092] of the specification and item 15 in Figure 1), using at least data concerning actually using period such as elapsed months or using contact period from first registration year or a using contract year (See paragraphs [0106] and [0112] of the specification), out from data concerning the resold vehicle resold within a predetermined period, data concerning displacement volume, data concerning a new vehicle price, and data concerning the mileage in the actually using period (See paragraphs [0106] and [0112] of the specification),

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale are determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, a turbo and supercharger, a roof shape, emission control, a body size, automobile-tax classification, a

weight tax, an insurance class, a using contract year, the expiration year of a using contract, a using contact period, a new vehicle price, a sold price after expiration of using contract, mileage at the time of resale, and assessment evaluation at the time of resale." (See paragraphs [0021], and [0090] of the specification).

Claim 3 recites, "A vehicle resold price analysis system which estimates information concerning a sold price, a remaining price, or a remaining value rate of a vehicle before resale, comprising:

an estimated sold price calculation system using a correlation equation or a table having a correlation for obtaining information concerning estimated sold price, estimated remaining price, or estimated remaining value rate of vehicle before resale is obtained (See paragraph [0092] of the specification and item 15 in Figure 1), using at least data concerning actually using period such as elapsed months or using contact period from first registration year or a using contract year, and data concerning a new vehicle price, out from data concerning the resold vehicle resold within a predetermined period (See paragraphs [0106] and [0112] of the specification),

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale is determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, a turbo and supercharger, a roof shape, emission control, a body size, automobile-tax classification, a weight

tax, an insurance class, a using contract year, the expiration year of a using contract, a using contact period, a new vehicle price, a sold price after expiration of using contract, mileage at the time of resale, and assessment evaluation at the time of resale." (See paragraphs [0021] and [0090] of the specification).

Claim 8 recites, "A storage medium for storing data used for a vehicle resold price analysis system which estimates information concerning sold price, remaining price, or remaining value rate of the vehicle before resale, using data concerning resold vehicle (See Abstract),

wherein, concerning resold vehicle resold within a predetermined period, the storage medium stores therein at least data concerning actually using period such as elapsed months or a using contact period from first registration year or a using contract year, data concerning displacement volume, data concerning a new vehicle price, and data concerning mileage in the actually using period." (See paragraphs [0021] and [0090] of the specification).

Regarding claim 13, "A vehicle resold price analysis system which estimates information concerning a sold price, a remaining price, or a remaining value rate of a vehicle before resale, comprising:

an estimated sold price calculation system using information concerning estimated sold price, estimated remaining price (See paragraph [0092] of the specification and item 15 in Figure 1), or estimated remaining value rate at the time of resale is output by inputting or selecting data concerning elapsed period or using period from first registration year, vehicle type, popularity

index determined according to the vehicle type, new vehicle price, and the mileage (See paragraphs [0106] and [0112] of the specification),

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale is determined using a correlation equation drawn from correlation of at least elapsed period or using period from first registration year, vehicle type, popularity index determined according to the vehicle type, new vehicle price, a sold price at the time of resale, and the mileage at the time of resale, and using a table having the correlation, concerning the resold vehicle. (See paragraphs [0021], [0090] and [0092] of the specification).

Regarding claim 14, "A goods resold price analysis system which estimates information concerning sold price, remaining price, or remaining value rate of the goods before resale, comprising:

an estimated sold price calculation system using information concerning estimated sold price, estimated remaining price (See paragraph [0092] of the specification and item 15 in Figure 1), or estimated remaining value rate at the time of resale is output by inputting or selecting data concerning elapsed period or using period from manufacturing or selling time, selling price, and actual use (See paragraphs [0108] and [0116] of the specification),

wherein the sold price, the remaining price, or the remaining value rate of the goods before resale is determined using a correlation equation drawn from correlation of at least manufacturing or selling time or using period, selling price, sold price at the time of resale, and actual use data at the time of resale, and using a table having the correlation (See paragraph [0092] of the specification and item 15 in Figure 1).

Claim 15 recites, "A vehicle resold price analysis system which estimates information concerning sold price, remaining price, or remaining value rate of a vehicle before resale, comprising:

an estimated sold price calculation system that outputs average mileage, average sold price, average sold rate or average new vehicle price concerning resold vehicle, or standard mileage, standard sold price, standard sold rate, or standard new vehicle price concerning resold vehicle within a predetermined deviation value (See paragraph [0092], [0106] and [0123] of the specification and item 15 in Figure 1),

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale is determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, turbo and supercharger, roof shape, emission control, body size, automobile-tax classification, a weight tax, an insurance class, a using contract year, expiration year of a using contract, a using contact period, a new vehicle price, the sold price after expiration of using contract, mileage at the time of resale, and assessment evaluation at the time of resale." (See paragraphs [0021] and [0090] of the specification).

Claim 16 recites, "A remaining value profit-and-loss analysis system which estimates remaining value profit and loss of a vehicle before resale, comprising:

an estimated sold price calculation system calculates an estimated sold price at the time of resale from the new vehicle price, monthly average mileage, the assumption mileage at the time of expiration of using contract, or assumption using period, concerning a vehicle in a using contact period, and remaining value profit and loss are output from the estimated sold price, and the estimated sold price set at the time of a using contract (See paragraphs [0054] and [0094] of the specification),

wherein the remaining value profit and loss of a vehicle before resale is determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, turbo and supercharger, roof shape, emission control, body size, automobile-tax classification, a weight tax, an insurance class, a using contract year, expiration year of a using contract, a using contact period, a new vehicle price, the sold price after expiration of using contract, mileage at the time of resale, assessment evaluation at the time of resale." (See paragraphs [0021], [0090] and [0094] of the specification).

Claim 17 recites, "A remaining value profit-and-loss analysis system which estimates remaining value profit and loss of goods before resale, comprising:

an estimated sold price calculation system calculates an estimated sold price at the time of resale from a selling price, a monthly use situation, the assumption use situation at the time of expiration of using contract, or assumption using period concerning the goods in a using contact

period, and remaining value profit and loss are output from the estimated sold price, and the estimated sold price set at the time of the using contract (See paragraphs [0056] and [0108] of the specification),

wherein the remaining value profit and loss of goods before resale is determined using data concerning resold goods such as a maker name, a model grade, goods model, using contract year, the expiration year of a using contract, a using contact period, a selling price, a sold price after expiration of the using contract, actual using state at the time of resale, assessment evaluation at the time of resale." (See paragraphs [0021], [0090] and [0094] of the specification).

Claim 18 recites, "A remaining value setting system which sets remaining value concerning new contract vehicle, comprising:

an estimated sold price calculation system calculates an estimated sold price concerning new contract vehicle from a new vehicle price, monthly average mileage, assumption mileage at the time of expiration of using contract, or assumption using period concerning the vehicle in a using contact period, and remaining price concerning new contract vehicle is output from the estimated sold price (See paragraphs [0050] and [0092] of the specification and item 15 in Figure 1),

wherein the remaining value concerning new contract vehicle is determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of

doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, turbo and supercharger, roof shape, emission control, body size, automobile-tax classification, a weight tax, an insurance class, a using contract year, expiration year of a using contract, a using contact period, a new vehicle price, the sold price after expiration of using contract, mileage at the time of resale, and assessment evaluation at the time of resale." (See paragraphs [0021] and [0090] of the specification).

Claim 19 recites, "A remaining value setting system which sets a remaining value concerning new contract goods, comprising:

an estimated sold price calculation system calculates an estimated sold price concerning new contract goods from a selling price, a monthly use situation, an assumption use situation at the time of expiration of using contract, or an assumption using period concerning the goods in a using contact period, and remaining price concerning new contract goods is output from the estimated sold price (See paragraphs [0052] of the specification),

wherein the remaining value concerning new contract goods is determined using data concerning resold goods such as a maker name, a model grade, goods model, using contract year, the expiration year of a using contract, a using contact period, a selling price, a sold price after expiration of the using contract, actual using state at the time of resale, assessment evaluation at the time of resale." (See paragraphs [0021], [0090] and [0091] of the specification).

Claim 20 recites, "A vehicle resold price analysis system which estimates information concerning a sold price, a remaining price, or a remaining value rate of a vehicle before resale, comprising:

an estimated sold price calculation system using a resold vehicle having a standard deviation within a predetermined range is again selected from the average value of the sold price of the resold vehicle selected by the vehicle spec, and the average value of the sold price of the again selected resold vehicle is set as a standard sold price, and the standard sold price is set as an estimated sold price (See paragraphs [0058] and [0059] of the specification),

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale is determined using data concerning vehicle spec including a maker name, the number of years elapsed from manufacturing year, a vehicle type, a vehicle shape, displacement volume, fuel, grade, a transmission, and a drive system, and a sold price for each of classified resold vehicles." (See paragraphs [0021] and [0090] of the specification).

Claim 21 recites, "A remaining value calculation program embodied on a computerreadable medium and executable by a computer which is used for obtaining output information peculiar to a user application, wherein the program comprises

a vehicle database retrieving function which retrieves the database having vehicle sold data and vehicle type data such as the model specification number, the classification identification number and the vehicle type name (See paragraphs [0090] and [0091] of the specification), and which extracts a corresponding retrieval result information, and a remaining value calculation function which calculates the remaining value from the variation condition information was input in the user application, and the retrieval result information extracted by the retrieval (See paragraphs [0220], [0221] and [0223] of the specification),

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wherein a remaining value of a vehicle is determined by using vehicle type specification information for narrowing down specific vehicle type including model specification number, a classification identification number or a vehicle type name, and variable condition information such as a lease period, using period, vehicle registration date, leasing contract date, and a startusing date, mileage and ranking." (See paragraphs [0021] and [0090] of the specification).

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## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

First, whether Claims 1-8, and 10-23 meet the requirements of 35 U.S.C. 112, first paragraph.

Second, whether Claims 2-7 and 13-20 meet the requirements of 35 U.S.C. 112, second paragraph.

Third, whether the rejection of Claim 8 and claim 21 under 35 U.S.C. 102(e) as being anticipated by Whitworth (U.S. 6,622,129) is proper.

Fourth, whether the rejection of Claims 1-7, 10-20, 22 and 23 under 35 U.S.C. 103(a) as being unpatentable over Whitworth (U.S. 6,622,129) is proper.

#### VII. ARGUMENT

## Claim Rejections under 35 U.S.C. §112, First Paragraph

In the Final Office Action mailed December 18, 2007, Claims 1-8, and 10-23 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

On pages 2 and 3 of the Final Office Action mailed December 18, 2007 the Examiner makes two assertions.

First, the Examiner specifically discusses claim 1 in which he asserts that "There is no way to know what the "multi-regression equation" is or how to obtain it or how to use it to estimate a price".

Second, regarding claims 1, 3 and 20 the Examiner asserts that there is no support in the specification for the phrase "... wherein the sold price ... are determined using data ... including ...".

Regarding the first assertion, the appellant respectfully disagrees with the Examiner. As stated in claim 1, data concerning resold vehicle resold within a predetermined period is first extracted. As indicated in paragraph [0092] of the specification this data comes from the vehicle type database (13) and the resold vehicle database (14) and may include such items as new

vehicle price (paragraph 124), popularity index (paragraph 136), etc. Then in the second step of claim 1, a factor is extracted which has an affect on the vehicle resold price based on correlation analysis using the data extracted in the first step. Finally in the third step recited in claim 1, a multi-regression equation is obtained from a correlation of the extracted factor and data concerning sold price. This multi-regression equation may then be used to estimate an estimated sold price, an estimated remaining price, or an estimated remaining value rate. (See paragraph 145, 156-158 and 167 of the specification) Further, the Appellant need not define each and every term in the specification. For example, the term "equation" has an ordinary meaning in the art. The same is true of the term "multi-regression equation". Those of ordinary skill in the art of statistics recognize and understand of the term "multi-regression equation". Therefore, the means to obtain the term "multi-regression equation" is defined in the specification and claim 1 itself and its plain meaning is understood by those skilled in the art.

Regarding the second assertion, the Examiner is taking the position that since the specification uses the term "such as" then all the features and limitations recited in the specification and the claims are not required. The Examiner then apparently believes that he may pick and choose the limitations he will give patentably weight to. The Appellant is of the opinion that the Examiner is blatantly incorrect. In paragraph [0021] of the specification the term "such as" is used. However, this is used to indicate that the features identified may be used in the vehicle price analysis. Any or <u>all</u> of the elements may be used and claimed. Therefore,

the Applicant may claim all the elements and features supported in the specification in some or all the independent claims.

As will be discussed below, the Examiner is unable to discover a reference that meets all the claim limitations of the independent claims. The test for anticipation under 35 U.S.C. §102 was set forth by the Federal Circuit in <u>Verdegaal Bros. v. Union Oil Co. of California</u>, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed Cir. 1987). In the <u>Verdegaal</u> case, the Court indicated that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Id. The <u>Richardson</u> Court further indicated that "[t]he identical invention must be shown in as complete detail as contained in the claim." <u>Richardson v. Suzuki Motor Co.</u>, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1990). Under 35 USC §103 the combination of prior art must disclose all claimed elements or they must be rendered obvious by the prior art.

Therefore, it is the Appellant's opinion that the Examiner is taking this position in order to reject the claims on prior art that does not disclose all the claim limitations.

Therefore, reversal of the rejection of Claims 1-8, and 10-23 under 35 U.S.C. 112, first paragraph, is respectfully requested.

# Claim Rejections under 35 U.S.C. §112, Second Paragraph

Claims 2-7 and 13-20 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, the Examiner asserts on page 3 of the Final Office Action mailed December 18, 2007 that claims 2, 3 and 13-20 recite a system while the claims appear directed to a method. Further, the Examiner asserts that the inclusion of the estimated sold price calculation system (15) in the claims does not provide the structure required since the "correlation equation" is a mere mental step. As indicated in paragraph [0092], on page 25, lines 9-14 of the specification,

The estimated sold price calculation system 15 obtains a multi-regression equation, a correlation equation or a table having the correlation from the data of the vehicle type database 13 and the resold vehicle database 14, and calculates information concerning estimated sold price, estimated remaining price, or estimated remaining value rate before resale.

Therefore, the estimated sold price calculation system (15) calculates information concerning estimated sold price, estimated remaining price, or estimated remaining value rate before resale as recited in claims 2-7 and 13-20. Therefore, the estimated sold price calculation system (15) is a real device discussed in the specification and shown in Figure 1.

Therefore, reversal of the rejection of claims 2-7 and 13-20 under 35 U.S.C. 112, second paragraph, is respectfully requested.

Claim Rejections under 35 U.S.C. §102

Claim 8 and claim 21, are rejected under 35 U.S.C. 102(e) as being anticipated by

Whitworth (U.S. 6,622,129).

The Law

The test for anticipation under 35 U.S.C. §102 was set forth by the Federal Circuit in

Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053

(Fed Cir. 1987). In the Verdegaal case, the Court indicated that "A claim is anticipated only if

each and every element as set forth in the claim is found, either expressly or inherently

described, in a single prior art reference." Id. The Richardson Court further indicated that "[t]he

identical invention must be shown in as complete detail as contained in the claim." Richardson

v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1990).

Whitworth describes a method of creating an index of residual values for leased vehicles.

This method can transfer residual value risk. Further, lease securitization is possible using

residual value futures, options, bonds and insurance products. This method uses a Residual

Value Index (119) which is a sales volume weighted index of actual residual values for all

models sold in a particular model year.

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Regarding claim 8, there is no suggestion in Whitworth that mileage or displacement volume are stored as recited in the claim. As previously discussed, the Examiner appears to be of the opinion that he may pick and choose those elements recited in the claims that he wishes to address.

Therefore, claim 8 patentably distinguishes over the prior art relied upon by reciting,

"A storage medium for storing data used for a vehicle resold price analysis system which estimates information concerning sold price, remaining price, or remaining value rate of the vehicle before resale, using data concerning resold vehicle, wherein, concerning resold vehicle resold within a predetermined period, the storage medium stores therein at least data concerning actually using period such as elapsed months or a using contact period from first registration year or a using contract year, data concerning displacement volume, data concerning a new vehicle price, and data concerning mileage in the actually using period." (Emphasis Added)

Regarding claim 21, it is the Appellant's position that Whitworth does not disclose determining a remaining value from the variation condition information input in the user application. Further, Whitworth fails to disclose the "remaining value of a vehicle is determined by using vehicle type specification information for narrowing down specific vehicle type including model specification number, a classification identification number or a vehicle type name, and variable condition information such as a lease period, using period, vehicle registration date, leasing contract date, and a start-using date, mileage and ranking". As previously discussed, the Examiner appears to be of the opinion that he may pick and choose those elements recited in the claims that he wishes to address.

Therefore, claim 21 patentably distinguishes over the prior art relied upon by reciting,

"A remaining value calculation program embodied on a computer-readable medium and executable by a computer which is used for obtaining output information peculiar to a user application, wherein the program comprises a vehicle database retrieving function which retrieves the database having vehicle sold data and vehicle type data such as the model specification number, the classification identification number and the vehicle type name, and which extracts a corresponding retrieval result information, and a remaining value calculation function which calculates the remaining value from the variation condition information was input in the user application, and the retrieval result information extracted by the retrieval, wherein a remaining value of a vehicle is determined by using vehicle type specification information for narrowing down specific vehicle type including model specification number, a classification identification number or a vehicle type name, and variable condition information such as a lease period, using period, vehicle registration date, leasing contract date, and a start-using date, mileage and ranking." (Emphasis Added)

Therefore, reversal of the rejection of claim 8 and claim 21 under 35 U.S.C. 102(e) as being anticipated by Whitworth (U.S. 6,622,129) is respectfully requested.

## Rejections of the claims under 35 U.S.C. §103

Claims 1-7, 10-20, 22 and 23 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Whitworth (U.S. 6,622,129).

#### The Law

The test for obviousness under 35 U.S.C. §103 was set forth by the U.S. Supreme Court in <u>Graham v. John Deere, Co.</u>, 381 US 1, 148 USPQ 459 (1956). In the <u>Graham</u> case, the Supreme Court set forth the following three part test as providing the background for determining obviousness:

- 1. Determine the scope and content of the prior art;
- 2. Ascertain the differences between the prior art and the claims at issue; and
- 3. Resolve the level of ordinary skill in the pertinent art (Graham v. John Deere, Co., 381 US at 17).

The Court of Appeals for the Federal Circuit has expressly stated that secondary considerations such as commercial success, acceptance by those skilled in the art, and initial expressions of disbelief by experts are to be considered in making a determination of obviousness or non-obviousness. <u>Stratoflex v. Aeroquip</u>, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

Regarding claims 1, 2 and 23, the Examiner admits that Whitworth does not disclose the use of a multi-regression equation, but asserts that this would be obvious. The Examiner is

effectively stating this the use of multi-regression equations is "well known" in the art. In the response filed September 29, 2006 the Appellant traversed the Examiner's grounds of rejection and requested that the Examiner produce a reference teaching the same as required under MPEP §2144.03. The Examiner has not responded to this timely filed request. Therefore, claims 1, 2 and 23 are allowable over the prior art.

Regarding claim 3, the Examiner asserts that Whitworth discloses in Figure 3 correlation equations used to obtain information concerning estimated sold price, estimated remaining price, or estimated remaining value rate of vehicle before resale is obtained. However, Whitworth fails to disclose "the sold price, the remaining price, or the remaining value rate of a vehicle before resale is determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, a turbo and supercharger, a roof shape, emission control, a body size, automobile-tax classification, a weight tax, an insurance class, a using contract year, the expiration year of a using contract, a using contact period, a new vehicle price, a sold price after expiration of using contract, mileage at the time of resale, and assessment evaluation at the time of resale." As previously discussed, the

Examiner apparently believes he may pick and choose the limitations in the claims he wishes to address.

Regarding claims 4 and 10, the Examiner admits on page 5 of the Office Action mailed December 18, 2007 and July 3, 2006 that Whitworth does not teach using mileage from the actual using period. However, the Examiner asserts that this is obvious which is equivalent to saying that it is well known in the art. Again, in the response filed on September 29, 2006 the Appellant traversed the Examiner's assertions and requested that the Examiner produce a reference teaching the same as required under MPEP §2144.03. The Examiner again did not respond to this request. Therefore, as admitted by the Examiner, claims 4 and 10 contain allowable subject matter.

Regarding claims 5 and 11, the Examiner asserts that column D of Figure 5 of Whitworth describes a body type such as a sedan. Claims 5 and 11 are allowable by virtue of their dependence from allowable independent claims.

Regarding claim 6, the Examiner asserts that Figures 5-7 of Whitworth disclose outputting estimated sold price, estimated remaining price, or estimated remaining value rate of vehicle based on a correlation equation. Claim 6 is allowable by virtue of their dependence from an allowable independent claim.

Regarding claim 7, contrary to the Examiner's assertions the Appellant is of the position that Whitworth fails describes determining profit-and-loss information. Therefore, claim 7 patentably distinguishes over the prior art.

Further, claim 12 is allowable by virtue of its dependence upon an allowable independent claim.

Regarding claim 13, there is no suggestion in Whitworth of a popularity index determined according to the vehicle type and the mileage being stored. The Examiner has not addressed claim 13 at all on pages 5 and 6 of the Office Action mailed December 18, 2006.

Therefore, claim 13 is allowable over the prior art.

Regarding claim 14, this claim recites "the sold price, the remaining price, or the remaining value rate of the goods before resale is determined using a correlation equation drawn from correlation of at least manufacturing or selling time or using period, selling price, sold price at the time of resale, and actual use data at the time of resale, and using a table having the correlation". As previously discussed, the Examiner apparently believes he may pick and choose the limitations in the claims. The prior art of record fails to disclose these limitations. Therefore claim 14 is allowable.

Regarding claims 15, 16 and 18, Whitworth does not disclose or suggest using any form of mileage in its calculations. Therefore, claims 15, 16 and 18 are allowable over the prior art.

Regarding claim 17, Whitworth does not disclose outputting the remaining value profit and loss based on the estimated sold price as recited in claim 17. Therefore, claim 17 is allowable over the prior art.

Regarding claim 19, the limitations of "the remaining value concerning new contract goods is determined using data concerning resold goods such as a maker name, a model grade, goods model, using contract year, the expiration year of a using contract, a using contact period, a selling price, a sold price after expiration of the using contract, actual using state at the time of resale, assessment evaluation at the time of resale" is not disclosed by the prior art.

Regarding claim 20, the Examiner admits on page 6 of the Final Office Action mailed December 12, 2006 and the Office Action mailed July 3, 2006 that Whitworth does not describe using a standard deviation, but the Examiner asserts that this would be obvious. The Examiner is effectively stating this the use of a standard deviation is "well known" in the art. Therefore, in the amendment filed September 29, 2006 the Appellant traversed the Examiner's grounds of rejection and requested that the Examiner produce a reference teaching the same as required under MPEP §2144.03. Specifically, the Appellant requested that the reference disclose "a resold vehicle having a standard deviation within a predetermined range is again selected from the average value of the sold price of the resold vehicle selected by the vehicle spec..."

(Emphasis Added). The Examiner did not respond to the Appellant's request and in the response to our arguments on page 8 of the Final Office Action simply indicated that a standard deviation

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is "well known". Since the Examiner admits that the prior art fails to disclose the limitations recited in claim 20 and is unable to produce a reference in support of his assertions of "well known" subject matter, claim 20 is allowable over the prior art of record.

Regarding claim 22, the Examiner admits that Whitworth does not disclose a secondary retrieval program, but indicates that this information is shown in Figures 5-7 of Whitworth. However, Whitworth does not disclose such items as shape, fuel, displacement volume, vehicle weight, or the maximum burden as recited in claim 22. Therefore, claim 22 contains patetnable subject matter.

Therefore, reversal of the rejection of Claims 1-7, 10-20, 22 and 23 under 35 U.S.C. 103(a) as being unpatentable over Whitworth (U.S. 6,622,129) is respectfully requested. is respectfully requested.

## **Authorization to Charge Deposit Account**

In the event this paper is not timely filed, appellant hereby petitions for an appropriate extension of time. The fee for any such extension may be charged to our Deposit Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP

George N. Stevens Attorney for Applicants

In to

Reg. No. 36,938

GNS/jls

Atty. Docket No. **020063** Suite 1000,1725 K Street, N.W. Washington, D.C. 20006 (202) 659-2930 PATENT TRADEMARK OFFICE

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Enclosures: Appendices

VIII. CLAMS APPENDIX TO APPEAL BRIEF U.S. SERIAL NO.: 10/030,149

Claim 1 (Previously Presented): A method of determining a vehicle resold price which

estimates information concerning a sold price, a remaining price, or a remaining value rate of a

vehicle before resale, the method comprising the steps of:

a first step which extracts data concerning resold vehicle resold within a predetermined

period,

a second step which extracts a factor which has affected the vehicle resold price by

correlation analysis using said data extracted at the first step, and

a third step which obtains multi-regression equation from a correlation of the extracted

above-mentioned factor and the data concerning sold price,

wherein the multi-regression equation obtained in the third step is used for estimating the

information concerning estimated sold price, estimated remaining price, or estimated remaining

value rate of vehicle before resale.

wherein the sold price, the remaining price, or the remaining value rate of a vehicle

before resale are determined using data concerning resold vehicle including a maker name, a

vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a

model specification number, a classification identification number, a transmission, a drive

system, displacement volume, the number of doors, popularly called model, a capacity and

burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, a turbo

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and supercharger, a roof shape, emission control, a body size, automobile-tax classification, a weight tax, an insurance class, a using contract year, the expiration year of a using contract, a using contact period, a new vehicle price, a sold price after expiration of using contract, mileage at the time of resale, and an assessment evaluation at the time of resale.

Claim 2 (Previously Presented): A vehicle resold price analysis system which estimates information concerning a sold price, a remaining price, or a remaining value rate of a vehicle before resale, comprising:

an estimated sold price calculation system using a correlation equation or a table having a correlation for obtaining information concerning estimated sold price, estimated remaining price, or estimated remaining value rate of vehicle before resale is obtained, using at least data concerning actually using period such as elapsed months or using contact period from first registration year or a using contract year, out from data concerning the resold vehicle resold within a predetermined period, data concerning displacement volume, data concerning a new vehicle price, and data concerning the mileage in the actually using period,

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale are determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, a turbo

and supercharger, a roof shape, emission control, a body size, automobile-tax classification, a weight tax, an insurance class, a using contract year, the expiration year of a using contract, a using contact period, a new vehicle price, a sold price after expiration of using contract, mileage at the time of resale, and assessment evaluation at the time of resale.

Claim 3 (Previously Presented): A vehicle resold price analysis system which estimates information concerning a sold price, a remaining price, or a remaining value rate of a vehicle before resale, comprising:

an estimated sold price calculation system using a correlation equation or a table having a correlation for obtaining information concerning estimated sold price, estimated remaining price, or estimated remaining value rate of vehicle before resale is obtained, using at least data concerning actually using period such as elapsed months or using contact period from first registration year or a using contract year, and data concerning a new vehicle price, out from data concerning the resold vehicle resold within a predetermined period,

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale is determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, a turbo and supercharger, a roof shape, emission control, a body size, automobile-tax classification, a weight

tax, an insurance class, a using contract year, the expiration year of a using contract, a using contact period, a new vehicle price, a sold price after expiration of using contract, mileage at the time of resale, and assessment evaluation at the time of resale.

Claim 4 (Original): A vehicle resold price analysis system according to claim 3, wherein data concerning the mileage in the actually using period is stored.

Claim 5 (Original): A vehicle resold price analysis system according to any one of claims 2 to 4,

wherein the resold vehicles are classified according to vehicle uses such as riding, business, cargo and bus, or according to a vehicle shape such as a sedan type, a hatchback type, and a one box type, and data concerning the classified resold vehicle is used.

Claim 6 (Previously Presented): A vehicle resold price analysis system according to any one of claims 2 to 4, wherein information concerning estimated sold price, estimated remaining price, or estimated remaining value rate of vehicle before resale is output using the obtained correlation equation or the table having the correlation.

Claim 7 (Previously Presented): A remaining value profit-and-loss analysis system which outputs remaining value profit-and-loss information at arbitrary time concerning vehicle

in a using contact period using the correlation equation or the table having correlation obtained by the vehicle resold price analysis system described in any one of claims 2 to 4.

Claim 8 (Original): A storage medium for storing data used for a vehicle resold price analysis system which estimates information concerning sold price, remaining price, or remaining value rate of the vehicle before resale, using data concerning resold vehicle,

wherein, concerning resold vehicle resold within a predetermined period, the storage medium stores therein at least data concerning actually using period such as elapsed months or a using contact period from first registration year or a using contract year, data concerning displacement volume, data concerning a new vehicle price, and data concerning mileage in the actually using period.

Claim 9 (Canceled).

Claim 10 (Original): A storage medium according to claim 8, wherein data concerning the mileage in the actually using period is stored.

Claim 11 (Original): A storage medium according to any one of claims 8 or 10, wherein the storage medium stores therein data which can be classified according to vehicle uses such as riding, business, cargo and bus, or according to a vehicle shape such as a sedan type, a hatchback type, and a one box type.

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Claim 12 (Previously Presented): A display for displaying data stored in the storage medium described in any one of claims 8 or 10.

Claim 13 (Previously Presented): A vehicle resold price analysis system which estimates information concerning a sold price, a remaining price, or a remaining value rate of a vehicle before resale, comprising:

an estimated sold price calculation system using information concerning estimated sold price, estimated remaining price, or estimated remaining value rate at the time of resale is output by inputting or selecting data concerning elapsed period or using period from first registration year, vehicle type, popularity index determined according to the vehicle type, new vehicle price, and the mileage,

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale is determined using a correlation equation drawn from correlation of at least elapsed period or using period from first registration year, vehicle type, popularity index determined according to the vehicle type, new vehicle price, a sold price at the time of resale, and the mileage at the time of resale, and using a table having the correlation, concerning the resold vehicle.

Claim 14 (Previously Presented): A goods resold price analysis system which estimates information concerning sold price, remaining price, or remaining value rate of the goods before resale, comprising:

an estimated sold price calculation system using information concerning estimated sold price, estimated remaining price, or estimated remaining value rate at the time of resale is output by inputting or selecting data concerning elapsed period or using period from manufacturing or selling time, selling price, and actual use,

wherein the sold price, the remaining price, or the remaining value rate of the goods before resale is determined using a correlation equation drawn from correlation of at least manufacturing or selling time or using period, selling price, sold price at the time of resale, and actual use data at the time of resale, and using a table having the correlation.

Claim 15 (Previously Presented): A vehicle resold price analysis system which estimates information concerning sold price, remaining price, or remaining value rate of a vehicle before resale, comprising:

an estimated sold price calculation system that outputs average mileage, average sold price, average sold rate or average new vehicle price concerning resold vehicle, or standard mileage, standard sold price, standard sold rate, or standard new vehicle price concerning resold vehicle within a predetermined deviation value,

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale is determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, turbo and supercharger, roof shape, emission control, body size, automobile-tax classification, a weight tax, an insurance class, a using contract year, expiration year of a using contract, a using contact period, a new vehicle price, the sold price after expiration of using contract, mileage at the time of resale, and assessment evaluation at the time of resale.

Claim 16 (Previously Presented): A remaining value profit-and-loss analysis system which estimates remaining value profit and loss of a vehicle before resale, comprising:

an estimated sold price calculation system calculates an estimated sold price at the time of resale from the new vehicle price, monthly average mileage, the assumption mileage at the time of expiration of using contract, or assumption using period, concerning a vehicle in a using contact period, and remaining value profit and loss are output from the estimated sold price, and the estimated sold price set at the time of a using contract,

wherein the remaining value profit and loss of a vehicle before resale is determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of

cylinders of engine, an engine mechanism, tire size, turbo and supercharger, roof shape, emission control, body size, automobile-tax classification, a weight tax, an insurance class, a using contract year, expiration year of a using contract, a using contact period, a new vehicle price, the sold price after expiration of using contract, mileage at the time of resale, assessment evaluation at the time of resale.

Claim 17 (Previously Presented): A remaining value profit-and-loss analysis system which estimates remaining value profit and loss of goods before resale, comprising:

an estimated sold price calculation system calculates an estimated sold price at the time of resale from a selling price, a monthly use situation, the assumption use situation at the time of expiration of using contract, or assumption using period concerning the goods in a using contact period, and remaining value profit and loss are output from the estimated sold price, and the estimated sold price set at the time of the using contract,

wherein the remaining value profit and loss of goods before resale is determined using data concerning resold goods such as a maker name, a model grade, goods model, using contract year, the expiration year of a using contract, a using contact period, a selling price, a sold price after expiration of the using contract, actual using state at the time of resale, assessment evaluation at the time of resale.

Claim 18 (Previously Presented): A remaining value setting system which sets remaining value concerning new contract vehicle, comprising:

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an estimated sold price calculation system calculates an estimated sold price concerning new contract vehicle from a new vehicle price, monthly average mileage, assumption mileage at the time of expiration of using contract, or assumption using period concerning the vehicle in a using contact period, and remaining price concerning new contract vehicle is output from the estimated sold price,

wherein the remaining value concerning new contract vehicle is determined using data concerning resold vehicle such as a maker name, a vehicle type name, vehicle uses, a vehicle shape, a vehicle type grade, authorization model, a model specification number, a classification identification number, a transmission, a drive system, displacement volume, the number of doors, popularly called model, a capacity and burden, engine model, the number of cylinders of engine, an engine mechanism, tire size, turbo and supercharger, roof shape, emission control, body size, automobile-tax classification, a weight tax, an insurance class, a using contract year, expiration year of a using contract, a using contact period, a new vehicle price, the sold price after expiration of using contract, mileage at the time of resale, and assessment evaluation at the time of resale.

Claim 19 (Previously Presented): A remaining value setting system which sets a remaining value concerning new contract goods, comprising:

an estimated sold price calculation system calculates an estimated sold price concerning new contract goods from a selling price, a monthly use situation, an assumption use situation at the time of expiration of using contract, or an assumption using period concerning the goods in a using contact period, and remaining price concerning new contract goods is output from the estimated sold price,

wherein the remaining value concerning new contract goods is determined using data concerning resold goods such as a maker name, a model grade, goods model, using contract year, the expiration year of a using contract, a using contact period, a selling price, a sold price after expiration of the using contract, actual using state at the time of resale, assessment evaluation at the time of resale.

Claim 20 (Previously Presented): A vehicle resold price analysis system which estimates information concerning a sold price, a remaining price, or a remaining value rate of a vehicle before resale, comprising:

an estimated sold price calculation system using a resold vehicle having a standard deviation within a predetermined range is again selected from the average value of the sold price of the resold vehicle selected by the vehicle spec, and the average value of the sold price of the again selected resold vehicle is set as a standard sold price, and the standard sold price is set as an estimated sold price,

wherein the sold price, the remaining price, or the remaining value rate of a vehicle before resale is determined using data concerning vehicle spec including a maker name, the number of years elapsed from manufacturing year, a vehicle type, a vehicle shape, displacement volume, fuel, grade, a transmission, and a drive system, and a sold price for each of classified

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resold vehicles.

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Claim 21 (Previously Presented): A remaining value calculation program embodied on a computer-readable medium and executable by a computer which is used for obtaining output information peculiar to a user application, wherein the program comprises

a vehicle database retrieving function which retrieves the database having vehicle sold data and vehicle type data such as the model specification number, the classification identification number and the vehicle type name, and which extracts a corresponding retrieval result information, and a remaining value calculation function which calculates the remaining value from the variation condition information was input in the user application, and the retrieval result information extracted by the retrieval,

wherein a remaining value of a vehicle is determined by using vehicle type specification information for narrowing down specific vehicle type including model specification number, a classification identification number or a vehicle type name, and variable condition information such as a lease period, using period, vehicle registration date, leasing contract date, and a startusing date, mileage and ranking.

Claim 22 (Original): A remaining value calculation program according to claim 21, wherein the program comprises, as the vehicle database retrieving function, a primary retrieving program which specifies a vehicle from a popularly called model of a maker, or a model specification number or certified model number described in an automobile inspection

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certificate, and a classification identification number, and which extracts a corresponding retrieval result information, and a secondary retrieving program which retrieves information given in retrieval sub-items such as a vehicle body number, a vehicle type name, shape, fuel, a transmission, displacement volume, a vehicle price, vehicle weight, or the maximum burden, when a vehicle can not be specified by the primary retrieving program or when a retrieval result information required by the primary retrieving program can not be extracted.

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Claim 23 (Original): A remaining value calculation program according to claim 21, wherein as the remaining value calculation function, using a remaining value calculation equation which utilizes multi-regression analysis, the specified vehicle type and the variation condition are applied to the remaining value calculation equation to calculate the remaining value.

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# IX. EVIDENCE APPENDIX

None. There is no evidence being submitted pursuant to 37 CFR §1.130, §1.131 or §1.132 in this Appeal Brief.

# X. RELATED PROCEEDINGS APPENDIX

None. There is no known related proceedings associated with this Appeal Brief.